IN THE CLAIMS

1-39. Cancelled

40. (New) A method of integrating a hydrogel to an extracellular matrix, comprising the steps of:

(a) priming an extracellular matrix by treating said extracellular matrix with a priming agent to create a primed extracellular matrix, wherein said priming agent comprises a polysaccharide with at least one aldehyde group;

(b) adding to the primed extracellular matrix a polymerizable agent; and

(c) reacting the primed extracellular matrix and polymerizable agent to create a hydrogel covalently bound to the extracellular matrix.

41. (New) The method of claim 40 wherein the extracellular matrix is cartilage.

42. (New) The method of claim 41, wherein said cartilage is disposed in a mammal.

43. (New) The method of claim 40, wherein the polysaccharide is chondroitin sulfate.

44. (New) The method of claim 40, wherein said priming agent further comprises at least one free radical polymerizing group selected from the group consisting of an acrylate, diacrylate, oligoacrylate, dimethacrylate, and oligo methacrylate.

45. (New) The method of claim 40, wherein said polymerizable agent has at least one free radical polymerizable group selected from the group consisting of an acrylate, diacrylate, oligoacrylate, dimethacrylate, and oligomethacrylate.

46. (New) The method of claim 40, wherein said reacting step further comprises exposing said primed extracellular matrix and said polymerizable agent to ultraviolet radiation.

47. (New) The method of claim 40, wherein the polymerizable agent comprises biologically

active material.

48. (New) The method of claim 47, wherein the biologically active material comprises autologous cells.

49. (New) The method of claim 47, wherein the biologically active material comprises a growth factor.

50. (New) A hydrogel produced by a method comprising:

(a) priming an extracellular matrix comprising a plurality of amino groups by treating the extracellular matrix with a priming agent comprising a polysaccharide with at least one aldehyde group to create a primed extracellular matrix, wherein said priming comprises reacting said priming agent with said extracellular matrix to covalently bind said extracellular matrix and said priming agent;

(b) adding to the primed extracellular matrix a polymerizable agent; and

(c) reacting the primed extracellular matrix and polymerizable agent to create a hydrogel covalently bound to the extracellular matrix, wherein said reacting comprises covalently binding said polymerizable agent to said primed extracellular matrix and crosslinking said polymerizable agent.

51. (New) The method of claim 50 wherein the extracellular matrix is cartilage.

52. (New) The method of claim 51, wherein said cartilage is disposed in a mammal.

53. (New) The method of claim 50, wherein the polysaccharide is chondroitin sulfate.

54. (New) The method of claim 50, wherein said priming agent further comprises at least one free radical polymerizing group selected from the group consisting of an acrylate, diacrylate, oligoacrylate, dimethacrylate, and oligo methacrylate.

55. (New) The method of claim 50, wherein said polymerizable agent has at least one free radical polymerizable group selected from the group consisting of an acrylate, diacrylate, oligoacrylate, dimethacrylate, and oligomethacrylate.

56. (New) The method of claim 50, wherein said reacting further comprises exposing said primed extracellular matrix and said polymerizable agent to ultraviolet radiation.

57. (New) The method of claim 50, wherein the polymerizable agent comprises biologically active material.

58. (New) The method of claim 57, wherein the biologically active material comprises autologous cells.

59. (New) The method in claim 57, wherein the biologically active material comprises a growth factor.